

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Cancelled)
2. (Cancelled)
3. (Cancelled)
4. (Cancelled)
5. (New) A riffle distributor assembly for delivering pulverized solid fuel from an exhauster having a downstream open end to a pair of branch ducts each having an upstream end for distribution to at least a pair of burners mounted in a combustion vessel in order that the pulverized solid fuel can be combusted in a combustion process in the combustion vessel, said riffle distributor assembly comprising:
 - a plenum forming an enclosed space extending from the downstream open end of the exhauster to the upstream end of each of the pair of branch ducts;
 - a plurality of riffle element plates supported within said plenum, each of said plurality of riffle element plates having an intake opening;
 - each intake opening of each of said plurality of riffle element plates being formed by a vane subassembly;
 - said vane subassembly including a parallelepiped frame and a plurality of intake vanes;
 - said parallelepiped frame having a first side panel and a second side panel, said parallelepiped frame further having a track formed therein extending the length of said parallelepiped frame in a first direction;
 - each of said plurality of intake vanes having a first side and a second side, and each of said plurality of intake vanes being pivotally connected by a pivot connection to a respective one of said plurality of riffle element plates;
 - a slide drive slidably supported in said track for sliding movement of said slide drive along said track in said first direction, said slide drive including a plurality of cut-outs;

said first side of each of said plurality of intake vanes being pivotally mounted at a respective pivot location to said slide drive such that a portion of each of said plurality of intake vanes extends into a respective one of said plurality of cut-outs;

said respective pivot location at which each of said plurality of intake vanes is pivotally mounted to said slide drive is spaced in a second direction from the respective pivot connection at which each of said plurality of intake vanes is pivotally connected to the respective one of said plurality of riffle element plates; and

said second side of each of said plurality of intake vanes being pivotally mounted to a respective pivot bore formed in a first side panel of said parallelepiped frame.

6. (New) The riffle distributor assembly as set forth in Claim 5 wherein said plurality of intake vanes are each movable between a zero offset position and an offset position so as to vary the amount of pulverized solid fuel distributed to each of said pair of branch ducts.

7. (New) The riffle distributor assembly as set forth in Claim 6 further including an intake vane adjustment device comprising:

a motor drive assembly including a step motor and a rod;

said step motor having a selectively reversibly rotatable shaft, one end of said selectively reversibly rotatable shaft being connected to said rod;

one end of said rod being pivotally connected to said slide drive; and

said step motor being selectively actuatable to effect extension and retraction of said rod in said first direction such that the extension and retraction of said rod in said first direction effects sliding movement of said slide drive in said track so as to thereby cause said plurality of intake vanes to move between said zero offset position thereof and said offset position thereof.

8. The riffle distributor assembly as set forth in Claim 5 further including dual separator plates mounted between each adjacent pair of said plurality of riffle element plates so as to thereby define closed passages and open passages between said plurality of riffle element plates.